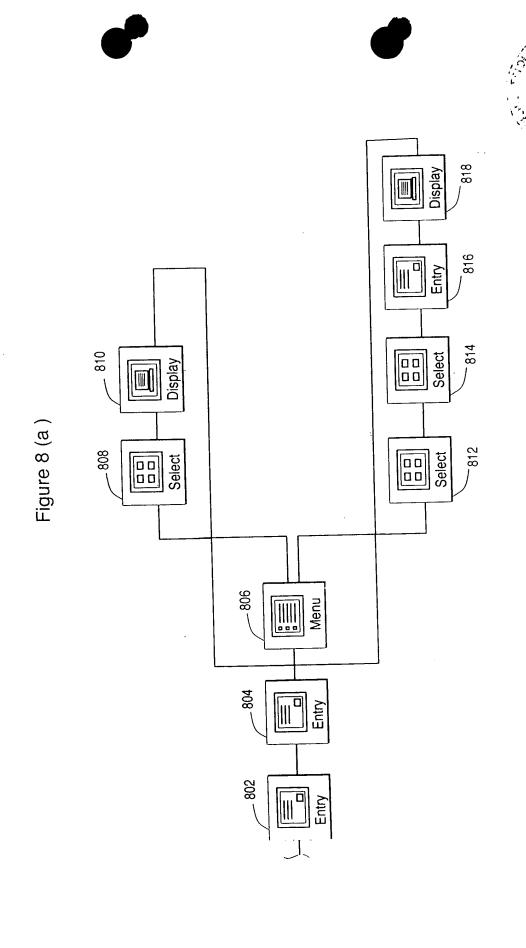


i i Tay



```
<?xml version="1-0" encoding="dTF-8" ?>
sapplication usecookies="false" स्ट="(F6681A6F-FB7C-4901-855C-08791DDE8DC8)
  securevariables="false">
   <description version="1" name="MQBanking" />
   <outtargets />
   <startform totargetid="UserID" />
   <subapos />
   <errortarget totargetid = "UserID" />
     </properties>
  <sessionvariables>
     <variable name="Session" />
    </sessionvariables>
   - <form targetid="UserID" includeheaders="false">
       <stylesheet contenttype="WML11" url="http://www.mobileq.com"/>
       <action totargetid="Password" name="OK" />
       <inputvariables />
      <outputvariables>
         <variable name="UserID" />
       </outputvariables>
       <events />
      </form>
    - <form targetid="Password" includeheaders="false">
        <stylesheet contenttype="WML11" url="http://www.mobileq.com"/>
        <action totargetid="Main" name="OK" />
      <inputvariables>
          <variable name="UserID" />
        </inputvariables>
       - <outputvariables>
          <variable name="Session" />
        </outputvariables>
        <events/>
       </form>
     - <form targetid="Main" includeheaders="false">
         <stylesheet contenttype="WML11" url="http://www.mobileq.com" />
         <action totargetid="Account" name="Account Balance" />
         <action totargetid="BIII Payment" name="Bill Payment" />
         <action totargetid="Transfer" name="Account Transfer" />
         <inputvariables />
         <outputvariables />
         <events />
        </form>
       <form targetid="Account" includeheaders="false">
         <stylesheet contenttype="WML11" url="http://www.mobileq.com" />
          <action totargetid="Details" name="OK" />
          <inputvariables />
         <outputvariables>
            <variable name="AccountID" />
          </outputvariables>
```

Figure 8(b)

```
<events />
 </form>
< <form targetid="Details" includeheaders="false">
   <stylesheet contenttype="WML11" url="http://www.mobileq.com" />
   <action totargetid="Main" name="OK" />
  - <inputvariables>
     <variable name="AccountID" />
   </inputvariables>
   <outputvariables />
   <events/>
  </form>
<action totargetid="Bill" name="OK" />
   <inputvariables />
   <outputvariables>
     <variable name="AccountID" />
    </outputvariables >
   <events/>
  </form>
 - <form targetid="Bill" includeheaders="false">
    <stylesheet contenttype="WML11" url="http://www.mobileq.com" />
    <action totargetid="Amount" name="OK" />
  - <inputvariables>
      <variable name="AccountID" />
    </inputvariables>
  - <outputvariables>
      <variable name="BillID" />
      <variable name = "AccountID" />
    </outputvariables>
    <events/>
   </form>
 - <form targetid="Amount" includeheaders="false">
    <stylesheet contenttype="WML11" url="http://www.mobileq.com" />
    <action totargetid="Confirm" name="OK" />
   - <inputvariables>
       <variable name="BillID" />
       <variable name="AccountID" />
     </inputvariables>
    <outputvariables>
       <variable name="AccountID" />
       <variable name="BillID" />
       <variable name="Amount" />
     </outputvariables>
     <events/>
  - <form targetid="Confirm" includeheaders="false">
     <stylesheet contenttype="WML11" url="http://www.mobileq.com" />
<action totargetid="Main" name="Cancel" />

    <inputvariables>

       <variable name="AccountID" />
<variable name="BillID" />
```

Figure 8(c)

```
<variable name = "Amount" />
</inputvariables>
<outputvariables>
<variable name = "AccountID" />
<variable name = "BillID" />
<variable name = "Amount" />
</outputvariables>
<events />
</form>
</form>
</forms>
<events />
<events />
```

Figure 8(d)

```
    <dataresults>

  . <data name="source1">
   - <RECORDS>
      <RECORD>
        <Blair PK="1">172-32-1176</Blair>
         <Test1 PK="1">1</Test1>
        <Test2 PK="1">2</Test2>
        <Test3 PK="1">3</Test3>
         <LastName>White</LastName>
         <FirstName>Johnson</FirstName>
       </RECORD>
       <RECORD>
         <Blair PK="1">213-46-891</Blair>
<Test1 PK="1">1</Test1>
         <Test2 PK="1">2</Test2>
         <Test3 PK="1">3</Test3>
         <LastName>Green</LastName>
         <FirstName> Marjorie </FirstName>
        </RECORD>
       <RECORD> -
         <Blair PK="1">238-95-7766</Blair>
         <Test1 PK="1">1</Test1>
         <Test2 PK="1">2</Test2>
         <Test3 PK="1">3</Test3>
         <LastName > Carson </LastName >
         <FirstName>Cheryl</FirstName>
        </RECORD>
      <a>>
        - <RECORD>
           <Blair PK="1">238-95-7766</Blair>
           <Test1 PK="1">1</Test1>
           <Test2 PK="1">2</Test2>
           <Test3 PK="1">3</Test3>
            <LastName>Carson</LastName>
            <FirstName>Cheryl</FirstName>
          </RECORD>
        </a>
       - <a>
          · <RECORD>
              <Blair PK="1">238-95-7766</Blair>
<Test1 PK="1">1</Test1>
              <Test2 PK="1">2</Test2>
              <Test3 PK="1">3</Test3>
              <LastName>Carson</LastName>
              <FirstName>Cheryl</FirstName>
             </RECORD>
           </b>
         </a>
        </RECORDS>
```

Figure 9(a)

```
</data>
< <data name="source2">
 - <RECORDS>
   - <RECORD>
      <Blair PK="1">aaaaaa</Blair>
      <Test1 PK = "1" > 1 < /Test1 > <Test2 PK = "1" > 2 < /Test2 >
      <Test3 PK="1">3</Test3>
      <LastName>White</LastName>
      <FirstName>Johnson</FirstName>
     </RECORD>
   - <RECORD>
       <Blair PK="1">bbbbbbb</Blair>
       <Test1 PK="1">1</Test1>
       <Test2 PK="1">2</Test2>
<Test3 PK="1">2</Test3>
       <LastName>Green</LastName>
       <FirstName>Marjorie</FirstName>
     </RECORD>
    - <RECORD>
       <Blair PK="1">ccccc</Blair>
       <Test1 PK="1">1</Test1>
       <Test2 PK="1">2</Test2>
       <Test3 PK="1">3</Test3>
       <LastName>Carson</LastName>
       <FirstName>Cheryl</FirstName>
      </RECORD>
    <6> -
      - <RECORD>
         <Blair PK="1">dddddd</Blair>
         <Test1 PK="1">1</Test1>
         <Test2 PK="1">2</Test2>
         <Test3 PK="1">3</Test3>
         <LastName>Carson</LastName>
         <FirstName>Cheryl</FirstName>
        </RECORD>
      </a>
     - <a>
      - <b>
        - <RECORD>
            <Blair PK="1">eeeeeee</Blair>
            <Test1 PK="1">1</Test1>
            <Test2 PK="1">2</Test2>
            <Test3 PK="1">3</Test3>
            <LastName>Carson</LastName>
            <FirstName>Cheryl</FirstName>
          </RECORD>
         </b>
       </a>
     </RECORDS>
    </data>
  </dataresults>
```

Figure 9(b)

Figure 9(c)

```
- <xs!:stylesheet xmlns:xsl="http://www.w3.org/TR/WD-xsl">
 . <xsl:template match="/">
    - <head>
        <meta name="FormType" content="SQSelectForm" />
        <meta name="ListMethod" content="numeric" />
        <xsl:attribute name="title">qwe</xsl:attribute>
       - 
        - <select >
            <xsl:attribute name="title">qwe</xsl:attribute>
            <xsl:attribute name="name">asd</xsl:attribute>
          - <xsl:for-each select="/rml/dataresults/data</p>
             [@name='source2']//RECORD">
            - <option>
             - <xsl:attribute name="value">
                 <xsl:value-of select="Blair" />
                 z1z
                 <xsl:value-of select="Test1" />
                 z1z
                 <xsl:value-of select="Test2" />
                 z1z
                 <xsl:value-of select="Test3" />
                </xsl:attribute>
                <xsl:attribute name="title">
                 <xsl:value-of select="LastName" />
                  <xsl:value-of select="FirstName" />
                  <xsl:value-of select = "/rml/data
                    [@name='source1']/RECORDS/RECORD/Blair"/>
                </xsl:attribute>
                blah blah blah
               </option>
             </xsl:for-each>
           </select>
          - <xsl:for-each select="/rml/actions//action">
          - <do>
             <xsl:attribute name="type">accept</xsl:attribute>
            - <xsl:attribute name="label">
               <xsl:value-of select="@actionid" />
             </xsl:attribute>
            - <go>
             - <xsl:attribute name="href">
                 <xsl:value-of select="@querystring"/>
               </xsl:attribute>
             </90>
            </do>
          </xsl:for each>
         </card>
```

Figure 10(a)

1

</wm1> </ri>
</xsl:template>
</xsl:stylesheet>

Figure 10(b)

```
< wm1>
. <nead>
    <meta name="FormType" content="SQSelectForm" />
    <meta name = "ListMethod" content = "numeric" />
  </head>
- <card title="Select Account">
     - <select title="Select Account" name="HoldingsAccount1D">
         <option value="1" title="Acct 10314">Acct 10314</option>
         <option value="2" title="Acct 11345">Acct 11345
       </select>
       <br />
     - <do type="accept" label="OK">
       co type= accept label= UK >
    <po href="?_SQRSIGN=A&_SQAPPID={8D360BDF-E570-45E9-BEC1-
4E5DD949C5C0}&_ACTIONID=OK&_SQFORMID={BCC091A1-63D4-
11D3-9E34-0090273EFC3B}
&HoldingsAccountID=$(HoldingsAccountID)
&UserID=246531&Session=1"/>
     </do>
   </card>
 </wml>
```

Figure 11

..

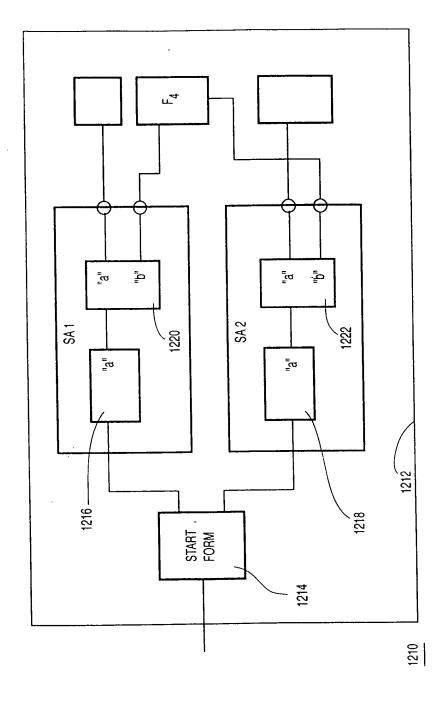


Figure 12

į

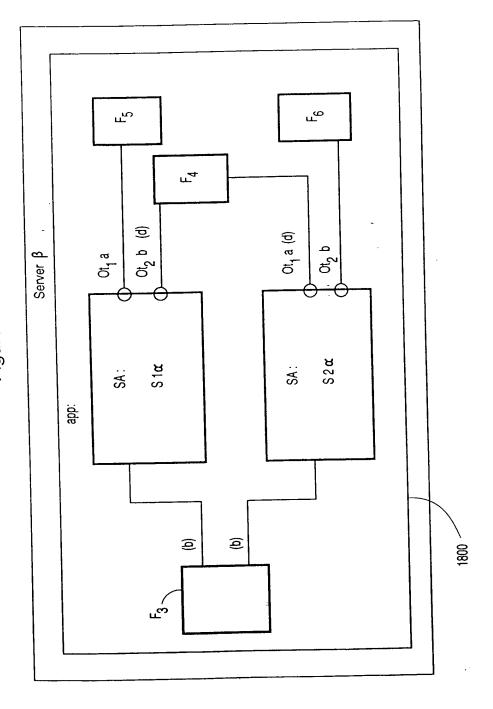


Figure 13



õ 05 Server a <u>ပ</u> <u>ල</u> Ω. т2 (a) ര SA டி 1400 /

Figure 14

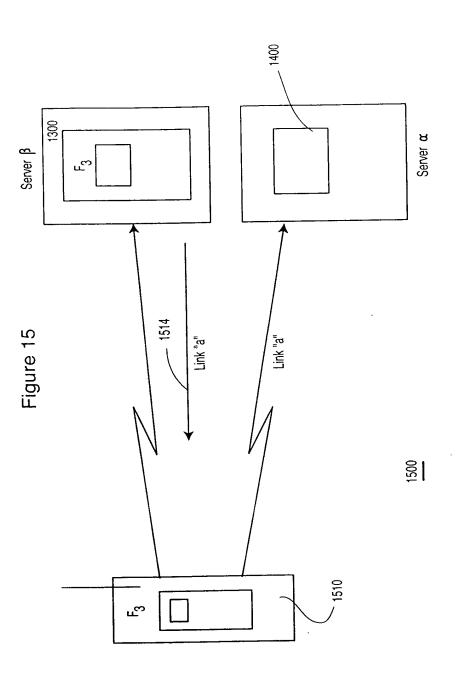


Figure 16 a

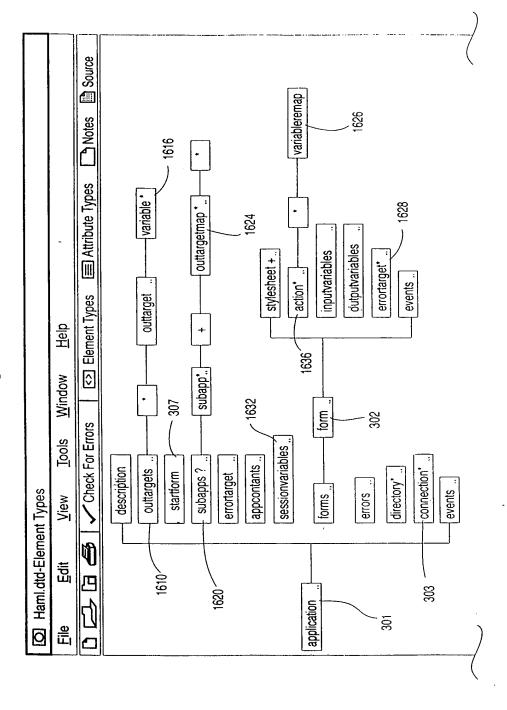


Figure 16 b

	Element Types	Text	Elem	<u>D</u> ata	Data Content Model	Attributes
0	application		⊳		(description, outtargets, startform, subapps?, err securevariable	securevariable
0	outtarget		S		(variable*)	targetid name
0	sessionvariables		\square		(variable)*	
0	variable					default required



- · Determine request signature
 - о арр
 - o largetid
 - o language
 - o markup
- Add to Runtime XML (RML)
 - c Request signature
 - Dictionary element containing the Name/value pairs from request
- Load app
- · Pass RML to app
- Process app
 - o Find targetid?
 - Subapp
 - Load subapp
 - Pass RML to app
 - Process app
 - Form
 - Generate Action urls and add them to the RML
 - o If no cookies
 - Include all variables
 - Remap to new names as described in HAML
 - Find a StyleSheet that matches the language and markup requested
 - Process Stylesheet
- If cookies are on and the device supports cookies
 - o Build cookie creation instructions for:
 - Out variables in the RML
 - · Remap to new names as described in HAML
 - Session variables in the RML
 - · Remap to new names as described in HAML
- Return generated markup

Figure 17